



NO. 3 BOCKING POSITION-ALTERED SIDE OF NO. 1 BLOCK		POINT A		POINT B		SEWELL TO	
SIDE	BLK	FWT	FWT	HT	HT	C	
P/S	1	53-9-0	18-9-0	4-5-7	14-3-0	4-10-2	-3 5/8"
P/S	2	53-9-0	16-3-0	4-5-7	14-3-0	4-11-1	-3 1/8"
P/S	3	69-3-0	16-3-0	2-2-0	18-9-0	3-0-5	-1 9/16"
P/S	4	77-9-0	16-3-0	2-2-0	18-9-0	2-6-5	-3/8"
P/S	5	85-9-0	16-3-0	2-2-0	18-9-0	2-12-1	-1/2"
P/S	6	93-9-0	16-3-0	2-2-0	18-9-0	2-4-12	-
P/S	7	101-9-0	16-3-0	2-2-0	18-9-0	2-4-12	-
P/S	8	109-9-0	16-3-0	2-2-0	18-9-0	2-4-13	-
P/S	9	117-9-0	16-3-0	2-1-1	18-9-0	2-5-1	+5/16"
P/S	10	125-9-0	15-9-0	2-2-1	18-3-0	2-6-8	+7/8"
P/S	11	133-9-0	15-9-0	2-2-1	18-3-0	2-9-6	+7/8"
P/S	12	141-9-0	15-9-0	2-2-1	18-3-0	2-14-14	+7/8"

NO	DOCKING POSITION—AFTER SIDE OF NO 1 BLOCK		55°-9 FROM REF PT		BEVEL IN 12°
	BLK NO	FWD OF REF PT	POINT A	POINT B	
			HB	HT	
P/S 1	55-9-0	11-9-0	4-0-10	14-3-0	4-5-4
P/S 2	67-9-0	16-3-0	2-10-6	18-9-0	3-2-14
P/S 3	79-9-0	20-7-0	1-10-6	22-9-0	2-1-15
P/S 4	91-9-0	25-1-0	1-0-12	26-9-0	2-4-13
P/S 5	103-9-0	16-3-0	2-1-8	18-9-0	2-4-12
P/S 6	115-9-0	16-3-0	0-2-0	13-3-0	2-4-14
P/S 7	127-9-0	15-9-0	2-2-8	18-3-0	2-7-4
P/S 8	139-9-0	13-5-0	2-3-0	15-11-0	2-8-9

BEARING ON BLOCKS				
SUPPORT	BEARING ON SHELL PLATING			
	8" - O" SPACED BEARERS	12" - O" SPACED BEARERS	16" - O" SPACED BEARERS	
SIDE BLOCKS 18" x 30" (TOTAL P/5)	12,960 SQ IN 30 SQ FT	8,640 SQ IN 20 SQ FT	6,480 SQ IN 15 SQ FT	
KEEL BLOCKS 36" x 42" (25)	25,200 SQ IN 175 SQ FT	25,200 SQ IN 175 SQ FT	25,200 SQ IN 175 SQ FT	
TOTAL BEARING	38,160 SQ IN 269 SQ FT	33,840 SQ IN 239 SQ FT	31,680 SQ IN 220 SQ FT	
BEARING PER SQ IN BLOCKING	134.0 LBS	151.1 LBS	161.14 LBS	
BEARING PER SQ FT BLOCKING	8.61 TONS	9.71 TONS	10.37 TONS	

* NOTE: KEEL BLOCK BEARING BASED ON A 24 INCH WIDTH OF CHOLE. TULL LOAD DISPLACEMENT 2,282 L LONG TONS OR 5,111,680 LBS

NO. 2 DOCKING		POINT A - AFTER SIDE OF NO. 1 BLOCK		POINT B		POINT C	
SIDC	BLK NO.	FWD OF	POINT A	POINT B	POINT A	POINT B	POINT C
			HT	HT	HT	HT	HT
P/2	1	65-0	16-3-0	2-1-4	18-9-0	4-1-2	-3 5/16"
P/2	3	65-0	16-3-0	3-1-4	18-9-0	3-5-12	-2 1/4"
P/2	3	73-0	16-3-0	2-1-3	18-9-0	2-8-10	-1"
P/2	4	81-0	16-3-0	2-1-2	18-9-0	2-5-1	-3/16"
P/2	3	89-0	16-3-0	2-1-2	18-9-0	2-5-1	-3/16"
P/2	6	97-0	16-3-0	2-1-2	18-9-0	2-4-12	-
P/2	7	105-0	16-3-0	2-1-2	18-9-0	2-4-12	+ 1/8"
P/2	8	113-0	16-3-0	2-1-2	18-9-0	2-4-12	+ 1/8"
P/2	9	121-0	16-0-0	2-1-11	18-6-0	2-5-14	+3/8"
P/2	10	129-0	15-9-0	2-3-4	18-3-0	2-8-3	+5/16"
P/2	11	137-0	15-9-0	2-3-4	18-3-0	2-8-3	+5/16"
P/2	12	145-0	13-5-0	2-5-5	15-10-11	3-1-2	4-11 1/4" +16"
P/2	12	145-0	13-5-0	2-5-5	15-10-11	3-1-2	4-11 1/4" +16"

SIDE	NO	REF PT	HB	HT	HB	HT	18 FOR
P/S	1	57-9-0	11-9-0	3-7-15	14-3-0	4-0-12	-3 1/4"
P/S	2	69-9-0	16-3-0	2-7-14	18-9-0	3-0-5	-1 9/16"
P/S	3	81-9-0	16-3-0	2-1-2	18-9-0	2-5-1	-3/16"
P/S	4	93-9-0	16-3-0	2-0-12	18-9-0	2-4-12	+
P/S	5	105-9-0	16-3-0	2-0-12	18-9-0	4-4-12	+
P/S	6	117-9-0	16-0-0	2-1-1	18-6-0	2-5-2	+ 3/8"
P/S	7	129-9-0	15-9-0	2-3-4	18-3-0	2-8-4	+ 15/16"
P/S	8	141-9-0	13-5-0	2-4-2	15-11-0	2-9-14	+ 1 3/16"

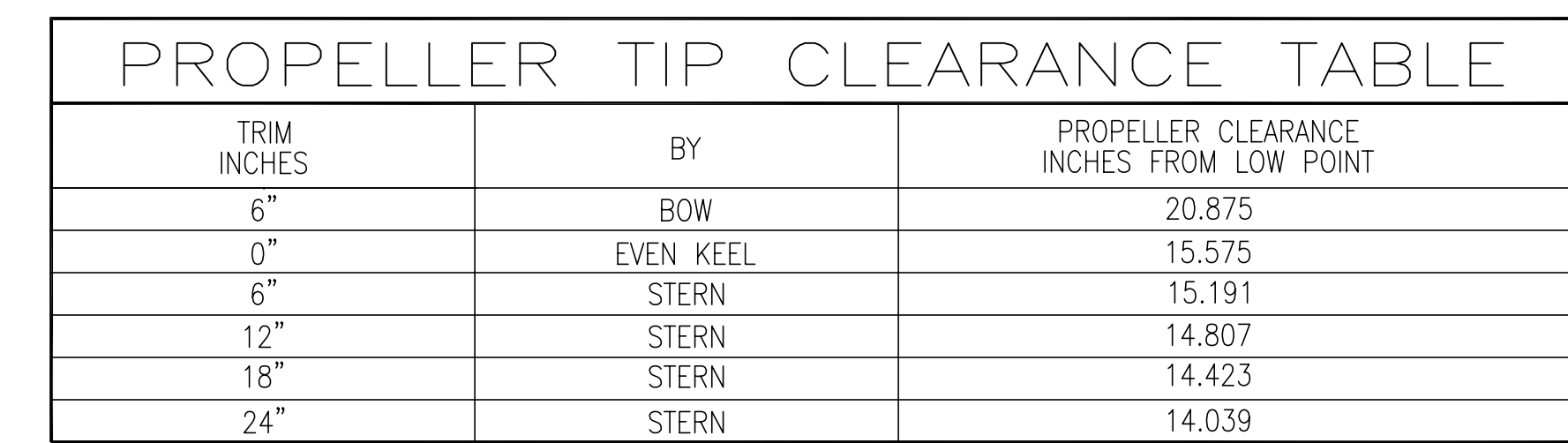
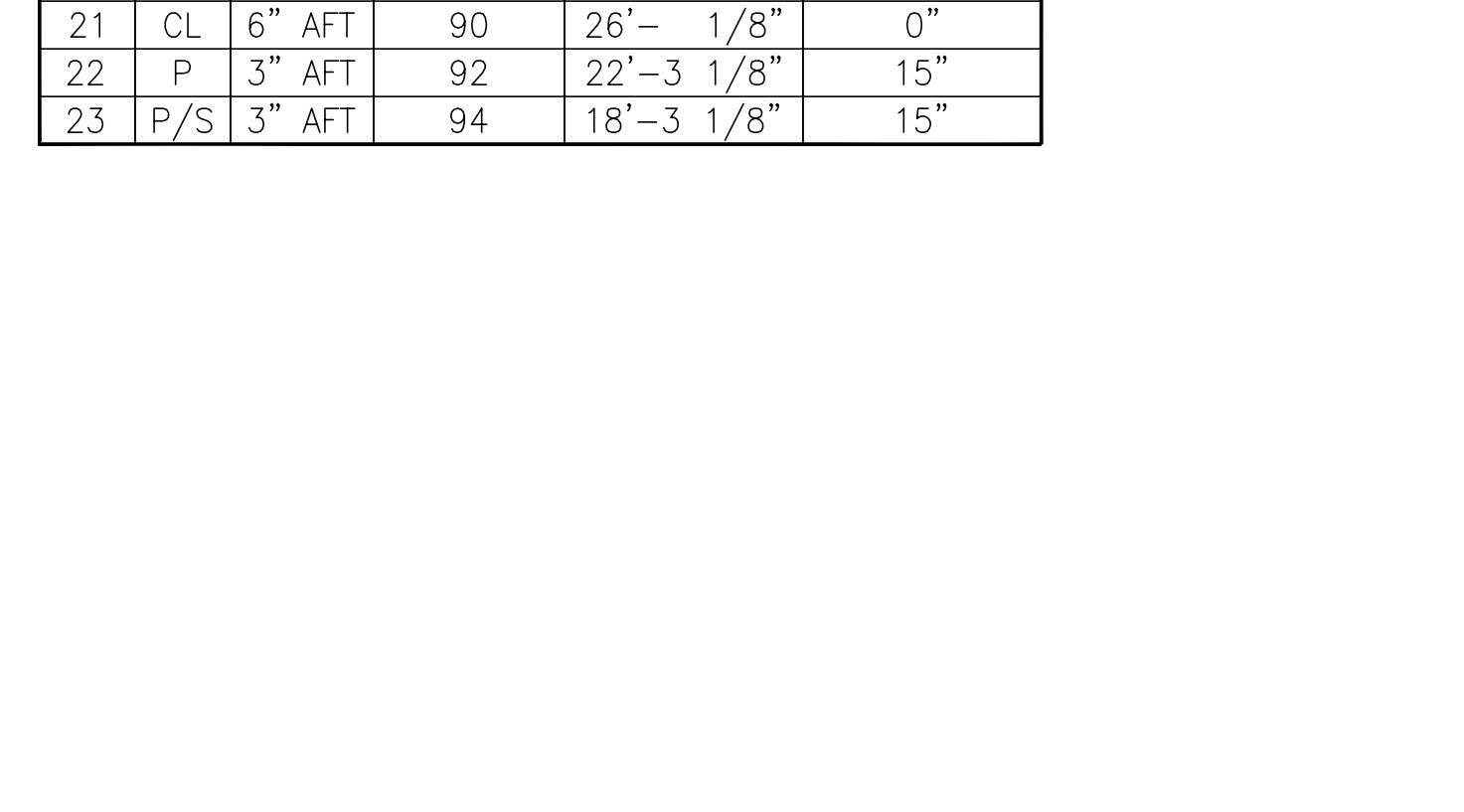
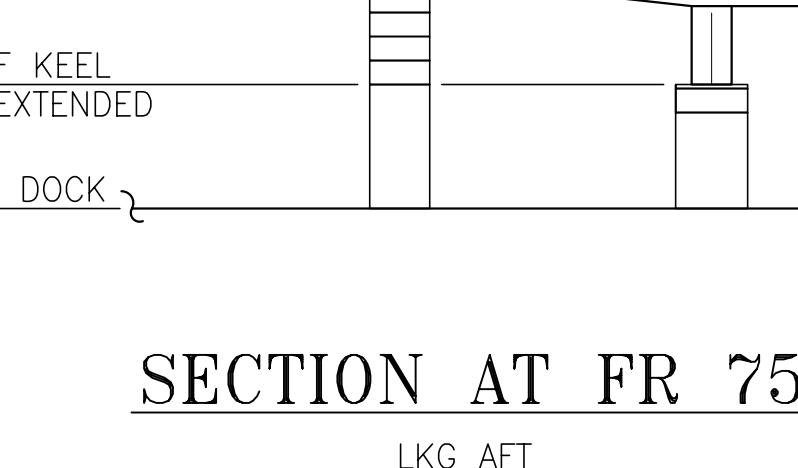
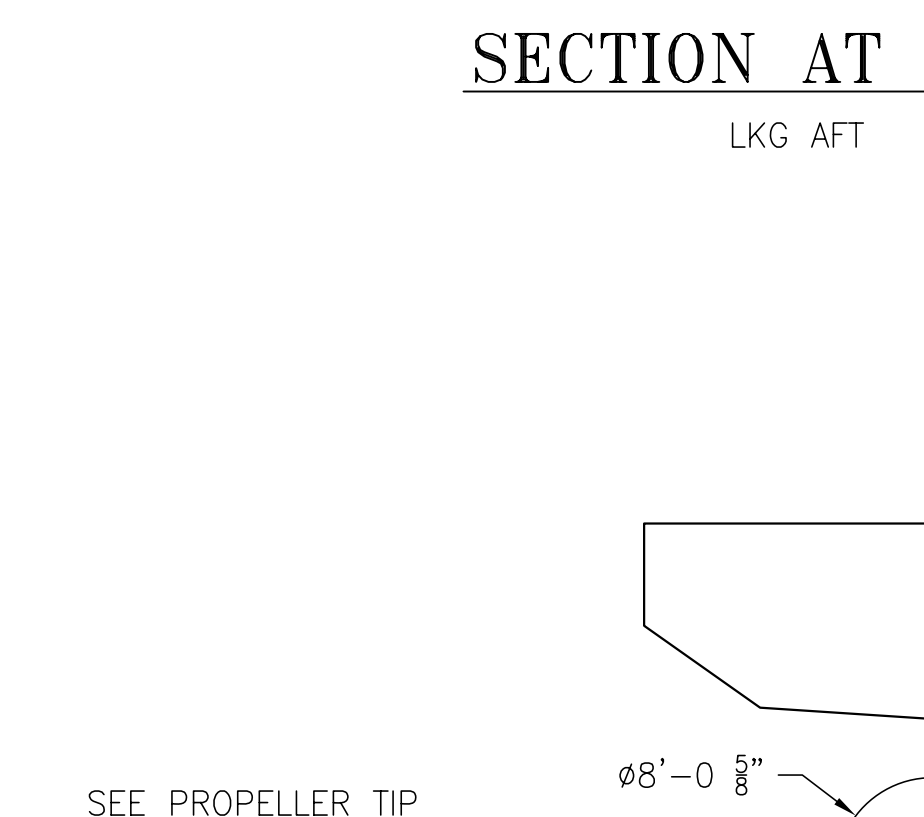
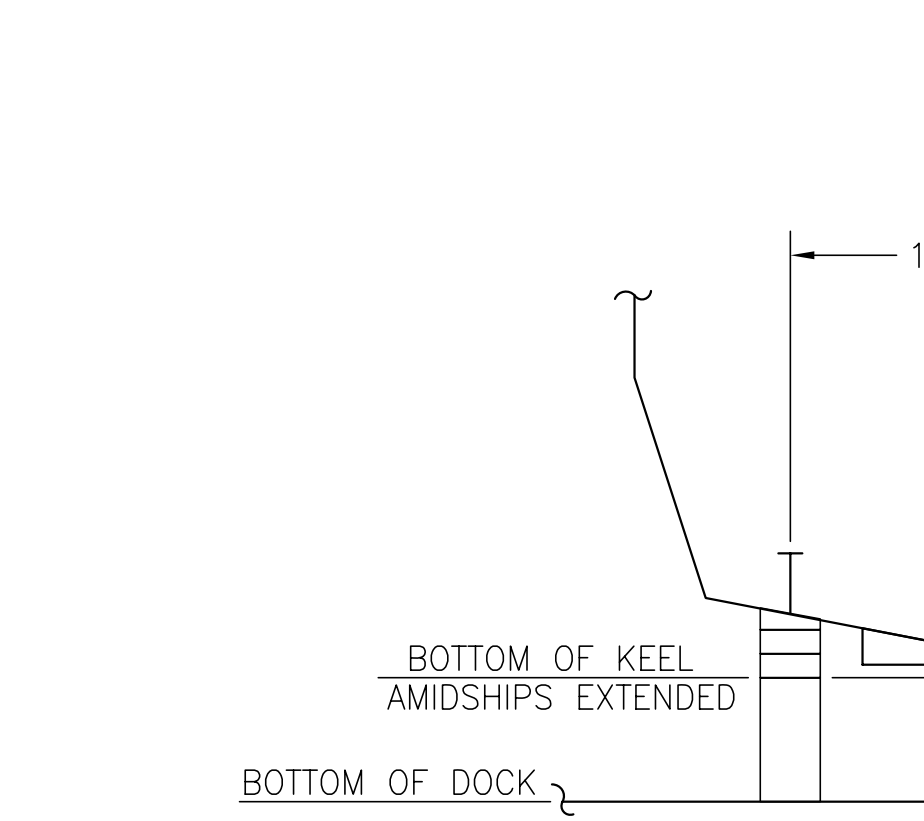
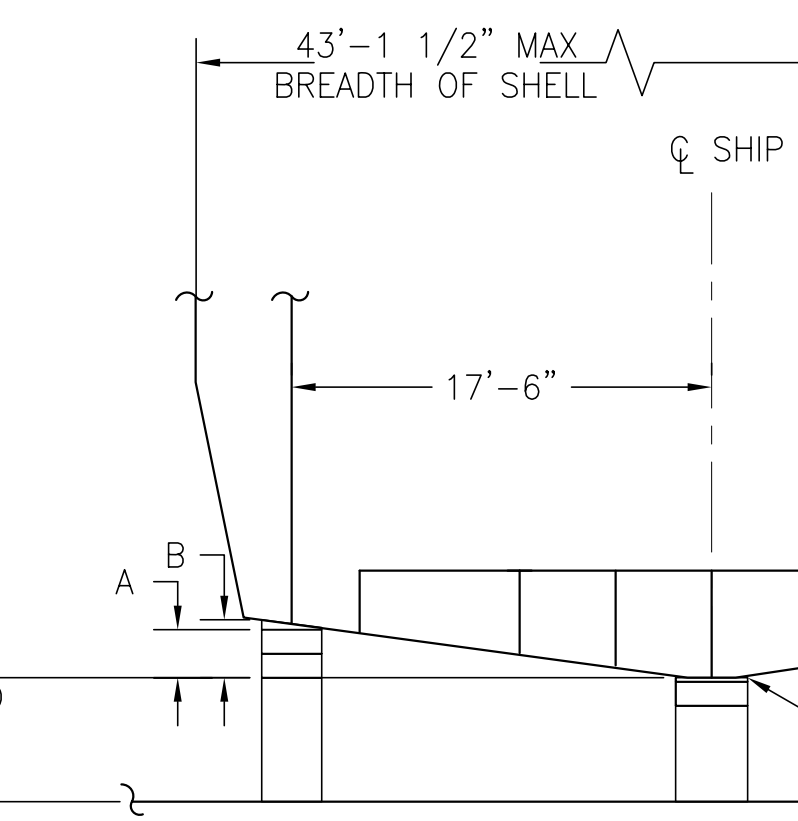
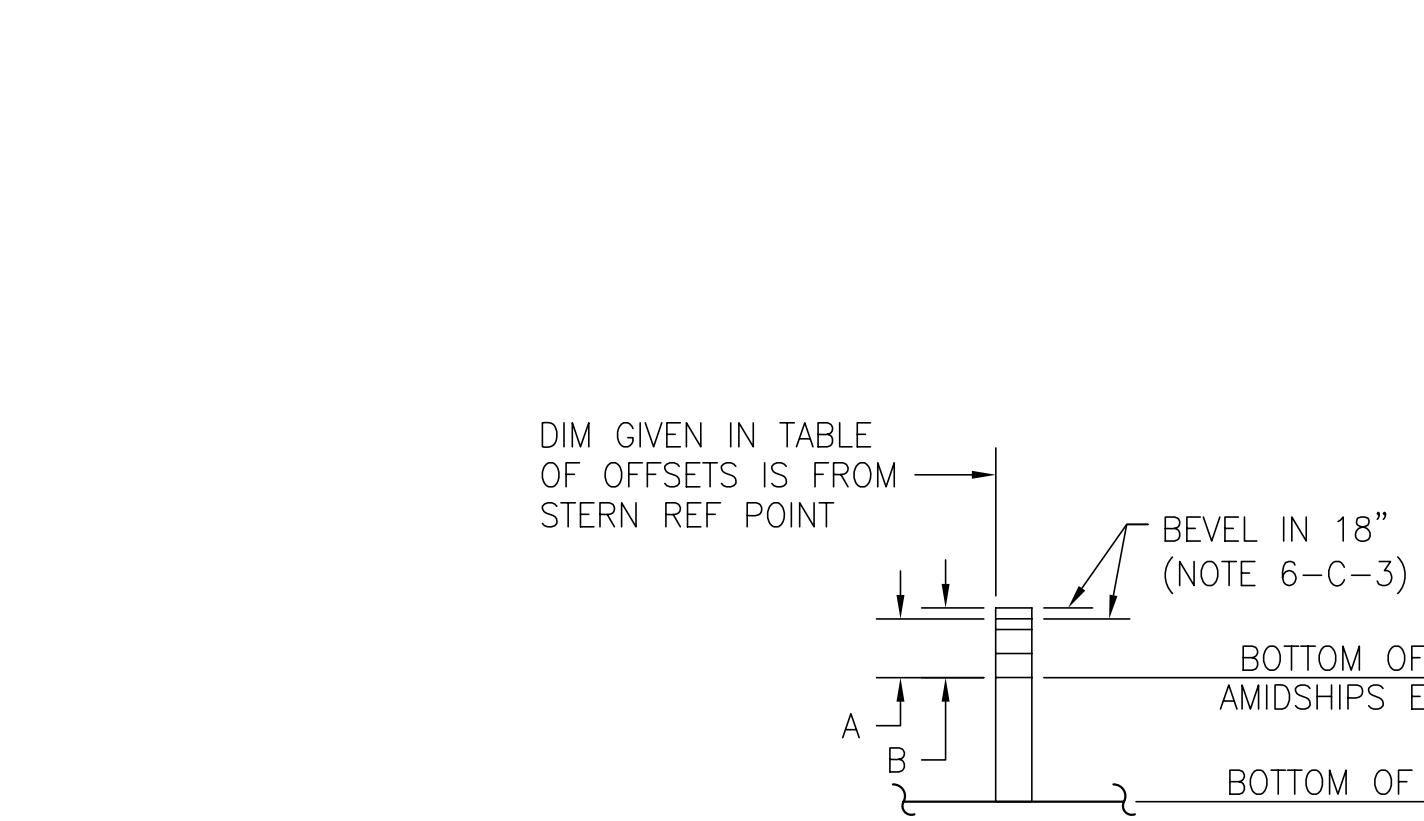
LIST OF ALL OPENINGS IN SHELL BELOW DWL										
ITEM NO	SERVICE	SIZE OF HOLE x 30"	SEALER OR PROTECTOR RING	SIZE SIDE	PWD AFT	FRAME	NO OF AFT REF POINT	DIST OFT CL SHEP	REGULATORY BUTTERFLY CLIP	REFERENCE
1	SEA CHEST	10" x 30"	-	S	12" AFT	37	131'-6"	9'- 9"	1'- 4 5/8"	REF 1
2	SEA CHEST	10" x 30"	-	S	12" AFT	38	129'-6"	13'- 0"	1'- 9 1/16"	REF 1
3	SEA CHEST	10" x 30"	-	S	12" AFT	67	71'-6"	40 1/2"	7 1/4"	REF 1
4	BOW THRUSTER	5-4" DIA	-	P/S	-	9	188'-6"	6'-5 1/16"	60"	REF 5
5	TRANSUCER	16" DIA	10 1/4" DIA	S	12" FWD	34	143'-6 1/8"	24"	3/4"	REF 6
6	DOPPLER SPEED LOG	18" DIA	-	S	12" FWD	25	157'-6"	6'- 8"	1'-7 13/16"	REF 2
7	AUX SW / BALLAST O.D.	6" DIA	-	S	11 13/16" AFT	44	117'-6 5/16"	21'- 6"	14'-8 9/16"	REF 11
8	AUX SW / COLL. O.D.	8" DIA	-	P	7 7/8" AFT	44	119'-2 1/4"	21'- 6"	14'-9 9/16"	REF 12
9	SEA BROW THRU COLL. O.D.	1 1/4" DIA	-	P	12" FWD	12	181'-6"	12'-11 1/4"	15'-9 1/16"	REF 13
10	BOW THRUST SEA SUCTION	1 1/4" DIA	-	S	12" FWD	12	181'-6"	11'- 2"	10'-6 9/16"	REF 13
11	SEAWATER SUCTION	2" DIA	-	P	12" AFT	24	157'- 5 3/8"	31"	-	REF 23
12	SEAWATER SUCTION	2" DIA	-	S	6" AFT	4	197'-11 3/8"	18 1/2"	8'-2"	REF 24

NO	1	DOCKING POSITION AT SECTOR	POINT A	POINT B	SECTOR
SIDE	BLK	FWT OF HT	HGT	HGT	
P/S	1	11-3-0	1-1-0	1-1-0	-1 7/8
P/S	2	63-9-0	16-3-0	3-4-3	3-5-8
P/S	3	61-9-0	16-3-0	2-5-19	2-10-5
P/S	4	79-9-0	13-9-0	1-9-6	16-3-0
P/S	5	87-9-0	16-3-0	2-1-0	16-3-0
P/S	6	95-9-0	16-3-0	2-0-12	2-0-12
P/S	7	103-9-0	16-3-0	2-0-12	18-9-0
P/S	8	111-9-0	16-3-0	2-1-6	18-9-0
P/S	9	119-9-0	16-0-0	2-1-6	18-9-0
P/S	10	127-9-0	15-9-0	2-2-8	18-9-0
P/S	11	135-9-0	15-9-0	2-2-8	18-9-0
P/S	12	143-9-0	13-5-0	2-5-8	15-11-0

P/S	4	89-9-0	16-3-0	2-0-13	18-9-0	2-4-13	-
P/S	5	101-9-0	16-3-0	2-1-2	18-9-0	2-4-12	+ 1/8
P/S	6	113-9-0	16-0-0	2-0-11	18-6-0	2-4-11	+ 3/8"
P/S	7	125-9-0	15-9-0	2-5-0	18-3-0	2-6-9	+ 11/16"
P/S	8	137-9-0	13-5-0	2-3-3	15-11-0	2-8-10	+ 11/16"

NOTE: DOCKS WHICH HAVE BEARERS FOR SIDE BLOCKS
SPACED 16' - 0" APART SHALL USE ODD NUMBERED
BLOCKS ONLY.

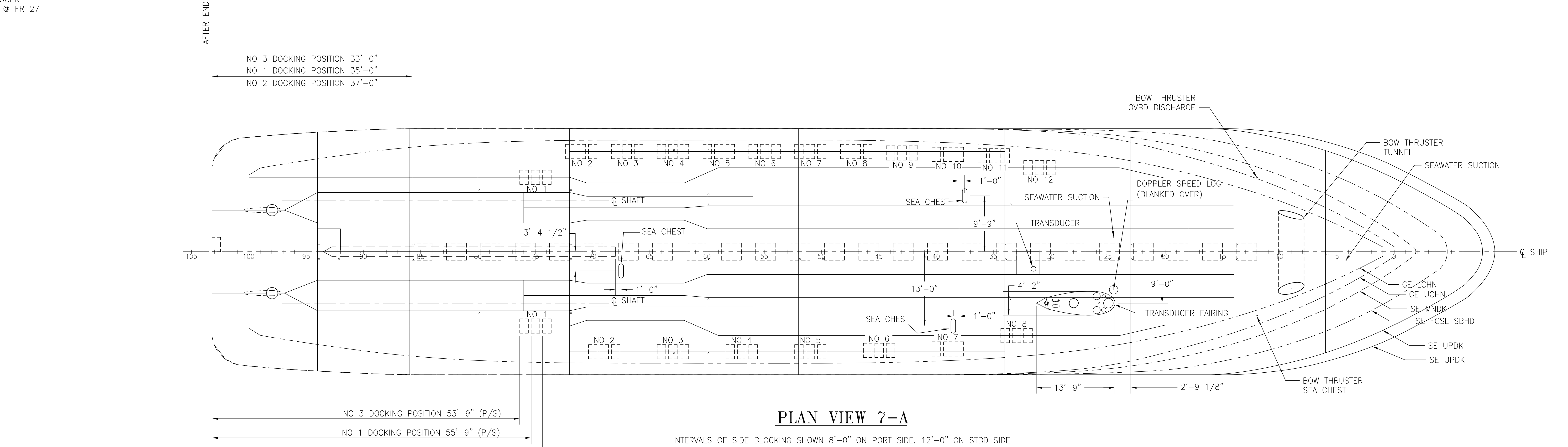
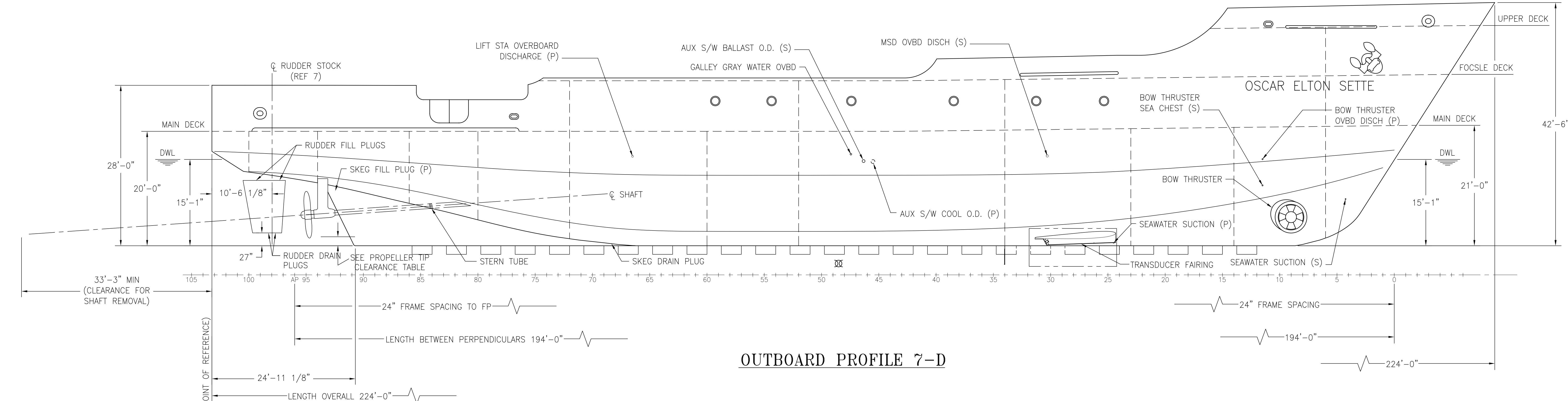
LIST OF DRAIN PLUGS IN SHELL						
NO	SIDE	FWO	FRAME	FWO OF AFT	DIST OFF	
1	S	6	AFT	4	198 - 1/8" 18-1/32"	
2	S	4	FWO	6	190 - 1/8" 1/8"	
3	S	3	FWO	7	190 - 1/8" 1/8"	
4	P	3	FWO	23	164 - 1/8" 6"	
5	S	3	FWO	25	196 - 1/8" 1/8"	
6	P	3	S	FWO	34	138 - 1/8" 1/8"
7	P	3	S	FWO	36	138 - 1/8" 1/8"
8	S	3	FWO	40	126 - 1/8" 1/8"	
9	S	3	FWO	50	106 - 1/8" 1/8"	
10	S	3	FWO	52	102 - 1/8" 1/8"	
11	S	3	FWO	56	98 - 1/8" 1/8"	
12	P	3	S	FWO	60	86 - 1/8" 8-4"
13	P	3	FWO	60	86 - 1/8" 1/8"	
14	P	3	S	FWO	60	86 - 1/8" 17-9"
15	P	3	S	FWO	62	82 - 1/8" 17-9"
16	P	3	S	AFT	63	80 - 1/8" 17-9"
17	P	3	S	AFT	72	62 - 1/8" 1/8"
18	P	3	S	FWO	82	62 - 1/8" 10-3"
19	P	3	S	AFT	86	62 - 1/8" 10-9"
20	P	3	S	AFT	86	34 - 1/8" 1/8"
21	CL	6	AFT	90	26 - 1/8" 0"	
22	CL	6	AFT	90	26 - 1/8" 1/8"	
23	P	3	S	AFT	94	18 - 1/8" 1/8"



LIST OF SEWAGE DISCHARGES									
ITEM NO	SIZE OF HOLE	SIDE	FWD AFT	FRAME	DISTANCE OFF CO SHIP	HIGH POINT ABOVE BOTTOM OF KEEL	REFERENCE	SERVICE	
1	2"	P	6"	FWD	75	16" - 0"	22" - 9/16"	REF 14	SHORE CONN
2	2"	S	6"	FWD	75	16" - 0"	22" - 9/16"	REF 14	SHORE CONN
3	4"	P	12" AFT	66	21" 1 3/16"	15" - 7/16"	REF 14	LIFT STA OVRD DISCH	
4	5"	S	12" AFT	47	21" - 6/8 3/8"	15" - 7/16"	REF 14	MSLY OVRD DISCH	
5	3"	S	10" 7/16" AFT	47	21" - 6/8 3/8"	16" - 0"	REF 25	GALLY OVRD DISCH	

TABLE OF DISPLACEMENT AND OTHER PROPERTIES FOR DOCKING							
MEAN DRAFT (FT)	DISPLACEMENT (TONS) (SEAWATER)	APPROX MOVEMENT TO CHANGE TRIM ONE INCH (INCH)	NO CORRECTIONS FOR TRIM		LONG. CENTER OF FLOATION (F) OF MIDBODIES	LONG. CENTER OF FLOATION (F) OF STERN	LONG. CENTER OF FLOATION (F) OF BOW
			C.B. END OF STERN REF (FT)	TONS PER INCH (SEAWATER)			
11.00	1,436.2	183.5	110.38	15.92	6.52	102.98	
12.00	1,531.0	191.0	109.95	16.34	7.33	102.17	
12.50	1,629.0	202.6	109.48	16.55	8.21	101.29	
13.00	1,729.4	214.6	108.92	17.10	9.22	100.22	
13.50	1,833.3	225.2	108.36	17.51	11.07	97.73	
14.00	1,940.0	235.2	107.76	17.73	12.46	95.14	
14.50	2,046.5	251.2	107.19	17.95	13.00	96.50	
15.00	2,154.9	259.9	106.64	18.14	13.50	96.00	
15.50	2,264.4	267.0	106.11	18.34	14.10	95.00	
15.25	2,191.7	270.9	105.85	18.43	14.32	95.18	

CRITICAL DIMENSIONS



REFERENCES		
NO	TITLE	DRAWING NO
	SEA CHESTS	163-633561
	COPIPER SPEED LOG ELEM & ISO WRG DIAGRAM	428-633561
	MODULE NO. 2, 5TRIL ASSY	110-633551
	MODULE NO. 5, 3TRIL ASSY	110-633550
	SHELL EXPANSION	110-633543
	NAVIGATION SYSTEM ELEM & ISO WRG DIAGRAM	428-633562
	MOLDED LINES	085-633539
	CURVES OF FORM	085-633539
	MOLDED OFFSETS	085-633534
	SHIPS BERTHING PLAN	085-633530
	MODULE NO. 4 & 5 PIPING INSTL	801-633594
	MODULE NO. 4 PIPING INSTL	801-633592
	MODULE NO. 1, PIPING INSTL	801-633589
	SEWAGE TREATMENT SYSTEM ARRGT	528-623872
	MODULE NO. 1, 3TRIL ASSY	110-633547
	MODULE NO. 3, 3TRIL ASSY	110-633534
	MODULE NO. 4, 3TRIL ASSY	110-633554
	MODULE NO. 6, 3TRIL ASSY	110-633555
	MODULE NO. 7, 3TRIL ASSY	110-633558
	MODULE NO. 8, 3TRIL ASSY	110-633559
	MODULE NO. 13, 3TRIL ASSY	110-633561
	MAIN PUMP SHUT ARSY	243-633870
	SEABASTER SUCTION MODIFICATION	05-520-001
	SALWATER DELIVERY SYSTEM INSTALLATION	05-524-001

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION OFFICE OF NOAA CORP OPERATIONS			
ART ANDERSON <small>ART ANDERSON, JR. 1000 1/2 ST. N. SEASIDE, N.C. 28581</small>		NOAA SHIP OSCAR E. SETTE	
TAR-FMP-062-(94) DESIG <u>L MINICARD</u> 12/15/04		DOCKING DRAWING	
DUN <u>A. WOODARD</u> 12/15/04			
CHK <u>L MINICARD</u> 12/15/04			
CHK <u>C. STACHUR</u> 12/15/04			
DESIG <u>C. STACHUR</u> 12/15/04			
SCALE: 1/8"=1'-0"		SIZE: CAD CODE: NOAA DRAWING NUMBER: REV: A HJOYLDJ CS OS-085-002 A	
SCALE: 1/8"=1'-0"		CAD FILENAME: SHET 1 OF 1	